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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,459	02/26/2002	Makoto Uchida	43888-127	3380
20277	7590	02/26/2004	EXAMINER	
MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			YUAN, DAH WEI D	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,459

Applicant(s)

UCHIDA ET AL.

Examiner

Dah-Wei D. Yuan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 13-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02262002
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

METHOD FOR PRODUCING FILM ELECTRODE JOINTED PRODUCT AND
METHOD FOR PRODUCING SOLID POLYMER TYPE FUEL CELL

Examiner: Yuan

S.N. 10/069,459

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February 19, 2004

Claim Objections

1. Claims 5-10,14,15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-10,14,15 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,2,11,12 are rejected under 35 U.S.C. 102(e) as being anticipated by Grot (US 6,641,862 B1).

With respect to claims 1,11, Grot teaches a method of manufacturing solid polymer fuel cell membrane electrode assembly using solution cast film and the resulting electrode assembly. A blank decal (10) (base film) is coated with catalyst slurry (11), dried and preferably cured, to give a catalyst coated structure of Stage A. The decal materials can be selected from a wide

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variety of substrates, including cellulosic and polymeric materials. The catalyst-coated film is then further coated with ionomer solution (12), which is cured to give the structure of stage B. Two of such half membrane electrode assembly can be combined, i.e., application of a second coating solution containing a catalyst 2 onto the structure of Stage B. It follows the peeling away of the decals as shown in Figure 2. See Abstract, Column 2, Lines 30-50; Column 3, Lines 17-20.

With respect to claim 2, after application of the catalyst and ionomer layers, each is dried and optionally cured at a temperature and for a time appropriate for that material. See Column 3, Lines 3-5.

With respect to claim 12, the catalyst slurry is prepared by ball milling a mixture of ionomer solution and platinum supported on carbon. The coating solutions contain a NAFION ionomer solution (a perfluorocarbon polymer having a sulfonic acid group). See Example.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said priority papers, JP 2000-204715 and JP 2000-204717, has not been made of record in accordance with 37 CFR 1.55. See MPEP §201.15.

Allowable Subject Matter

4. Claims 3,4,13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 3,13 would be allowable because the prior art does not disclose or suggest a coating solute containing an electrically-conductive carbon material and a

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binding material is applied onto said base film to form a first electrically-conductive layer prior to said step A and after said step C as stated in the claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lim et al. (US 6,344,428 B1) teach the fabrication of a membrane electrode assembly by a hot pressing technique.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
February 19, 2004

A handwritten signature in cursive script, appearing to read "Dah-Wei D. Yuan", followed by a long horizontal flourish.